

# **EXHIBIT A**

IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF TEXAS  
HOUSTON DIVISION

VIRGINIA ELIZONDO

Plaintiff,

v.

SPRING BRANCH INDEPENT SCHOOL DISTRICT, CHRIS GONZALEZ, PAM  
GOODSON, KAREN PECK, JOSEF D. KLAM, MINDA CAESAR, CHRIS EARNEST, J.  
CARTER BREED, in their official capacity as member of the Board of Trustee of Spring  
Branch ISD

Defendants

EXPERT REPORT  
OF  
Robert M. Stein, Ph.D.

January 20, 2022

## **I. Background and Qualifications**

I am the Lena Gohlman Fox Professor of Political Science and a fellow in urban politics at the Baker Institute at Rice University. A copy of my curriculum vitae is attached as Appendix A. I am being compensated at \$250 per hour.

My current research focuses on alternative modes of elections and voting procedures, voting behavior and public policy in the United States. I teach classes on voting behavior, election sciences, public policy and survey research.

My work has been supported by the National Science Foundation, the City of Houston's Office of Public Safety and Homeland Security and the Pew Charitable Trusts, among others. Some of my select publications include "Reducing the Undervote with Vote by Mail" (published in *American Politics Research*), "Election Administration during National Disasters and Emergencies: Hurricane Sandy and the 2012 Election" (published in *Election Law Journal*), "Voting for Minority Candidates in Multi-Racial/Ethnic Communities," (published in *Urban Affairs Review*) and "The Effect of Election Day Vote Centers on Voter Participation" (published in *Election Law Journal*). In addition, I have written extensively on federal spending, 'pork barrel politics' and the electoral connection between single member district representatives, spending policies and incumbent reelection (published in *American Journal of Political Science* and *Journal of Politics*). I am co-author of *Perpetuating the Pork Barrel* (Cambridge University Press). A complete list of my publications is included in my attached curriculum vitae.

Since 2010, I have been an expert witness in several cases involving election administration and voting. I have consulted for several jurisdictions in the design, implementation and evaluation of alternative voting systems including early voting, Election Day vote centers, mail-assisted voting and in-person polling locations. In these jurisdictions, I have worked closely with election administrators and elected officials to fulfill their obligation to conduct elections. These jurisdictions include: Collin, Harris and Lubbock Counties, Texas, 64 Colorado counties that make up the Colorado County Clerks Association, and Albuquerque, New Mexico. I have also designed voting districts for municipal governments and school districts in Texas. I am currently designing election districts for Lancaster ISD, Goose Creek ISD and the City of Baytown.

I have been retained by counsel for Virginia Elizondo to provide expert testimony on:

- Whether voting in SBISD school board elections is racially polarized.
- Whether Latinos or Hispanics are politically cohesive in SBISD school board trustee elections and vote as a block for Latino-preferred candidate.
- Whether the Latino or Hispanic voting age population in SBISD is sufficiently large and geographically compact to constitute a majority of the voting-age population in one or more single member districts under an illustrative seven-district plan.

- Whether White Non-Hispanics vote sufficiently as a bloc to enable them, in the absence of special circumstances (e.g., single-member districts), to defeat the minority voters' preferred candidates of choice.
- Whether single member district elections or at-large elections enhances the proportional representation of minority-preferred candidates on elected legislative bodies.
- Whether taxing and spending practices differ significantly between governments with single member district and at-large elections.
- Whether legislative bodies are more responsive to the preferences of minority and non-minority voters in at-large or single member district elections.

## **II. Summary of Opinions**

- There is statistically significant evidence of racial polarized voting in the Spring Branch Independent District's Board of Trustees elections for the period 2015-2021.
- White Non-Hispanics vote sufficiently as a bloc to enable them, in the absence of special circumstances (e.g., single-member districts), to defeat the minority voters' preferred candidates of choice.
- The geographic concentration of Hispanics in the Spring Branch Independent School District is sufficient to constitute a majority of the voting-age population in one or more single member districts under an illustrative seven-district plan.
- There is strong evidence in the scholarly literature to conclude that:
  - Single member district forms of representation enhances proportional representation of minority candidates on legislative bodies.
  - Single member district representation increases the likelihood that minority candidates will contest elections for position on legislative bodies.
  - Single member district representation will produce policies more responsive to the preference of minority voters.
- SBISD should adopt a single member district plan for the election of the district's seven trustees.

## **III. Materials Reviewed**

To establish an expert opinion in this case, I reviewed a variety of materials from academic, governmental, legal and media sources. Building on my existing knowledge, expertise and experience, I consulted the scholarly (peer reviewed) research on:

- Minority representation in local governments and school districts with single member and at-large representation.
- Spending and taxing practices of local governments and school districts with single member and at-large representation.
- The responsiveness of policies in local governments and school districts with single member and at-large forms of government.

I have relied on election results provided by the SBISD for trustee elections, data from the U.S. Bureau of the Census and Harris County's Election Administrator Office for my analysis of racially polarized voting in SBISD's trustee elections.

#### **IV. Racially polarized voting in Spring Branch Independent School District**

I used a definition of racially polarized voting as outlined in *Thornburg v. Gingles* to assess whether this condition existed in the Spring Branch School District trustee elections between 2017-2021. I further sought to determine whether the extent of racially polarized voting in SBISD trustee elections was of sufficient magnitude to dilute the votes of minority voters and prevent them from electing a candidate of their choice. Finally, I assessed the likelihood that single member district elections would remedy the effect of racially polarized voting in SBISD trustee elections.

Racially polarized voting is defined as when the relevant minority group “is politically cohesive and that the white majority voters sufficiently as a bloc to enable it... usually to defeat the minority’s preferred candidate (*Thornburg v Gingles* 478 U.S. 30, 49 (1986).”

In assessing the degree of racially polarized voting in SBISD trustee elections I obtained the following information:

- A list of all persons eligible to vote in SBISD trustee elections for the years in which trustee elections were held between 2015 and 2021.
- The residential location and voting precinct (i.e., latitude and longitude) of all eligible SBISD voters
- The voting histories of each eligible SBISD voter in the 2015, 2017, 2019 and 2021 SBISD trustee elections from data provide by SBISD and Harris County.
- The racial and ethnicity of each eligible SBISD voter using Imai and Khana (2016) ecological inference software. These estimates of racial and ethnicity are obtained by using the Center for Disease Control’s list of common racial and ethnic surnames along with information about the racial and ethnic makeup of the voter’s residential location i.e., census block or block group. Estimates at or above 90% were used to assigning voters to one racial and/or ethnic group including: Non-Hispanic White, Non-Hispanic Black, Non-Hispanic Asian, Non-Hispanic other and Hispanic.

I aggregated the proportion of voters by race and ethnicity by SBISD’s voting precincts (N=7) by election (N=5) to identify majority-minority and majority White precincts. I further calculated the proportion of vote cast for each trustee candidate by voting precinct.

Ten trustee contests were held between 2015 and 2021 in seven to eight election precincts per election. Four of the ten contests were uncontested (i.e., only one candidate stood for election). We can identify the share of vote cast for one or more trustee candidates and the share of voters in each precinct that are Non-Hispanic White, Non-Hispanic Black, Non-Hispanic Asian, Non-Hispanic other and Hispanic in 73 precinct election contests.

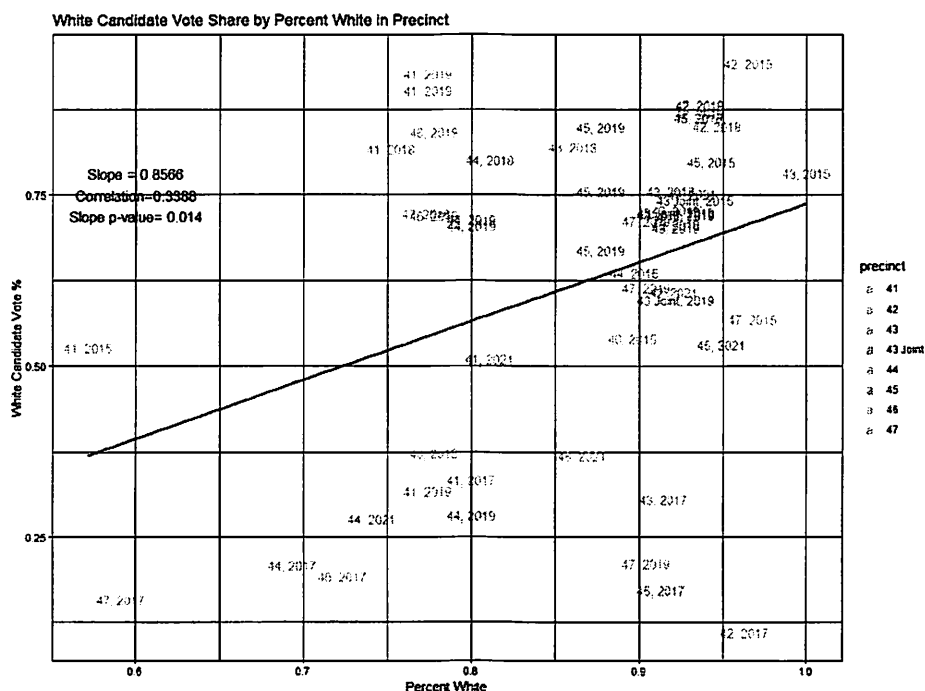
The dominant races and ethnicities among SBISD voters are White (majority) and Hispanic (minority). Asian and African-American SBISD voters rarely exceed 10% of the district voting population in any election year.

To measure the degree to which there is racially polarized voting in SBISD Trustee elections I regressed<sup>1</sup> the proportion of persons White and Hispanic in each voting district on the proportion of votes cast for each candidate. Racially polarized voting is established when the direction of these relationships are signed in opposite directions. A second condition for polarized voting is when the White majority vote against a minority preferred candidate i.e., Hispanic candidate is significant and positive. That is, the share of vote the Hispanic received increases significantly as the proportion of voters in each voting district increases.

Racially polarized voting is observed in every election studied. White and Hispanic voters diverge in their support for each candidate on the ballot, including uncontested contests where we report under vote as the second candidate.

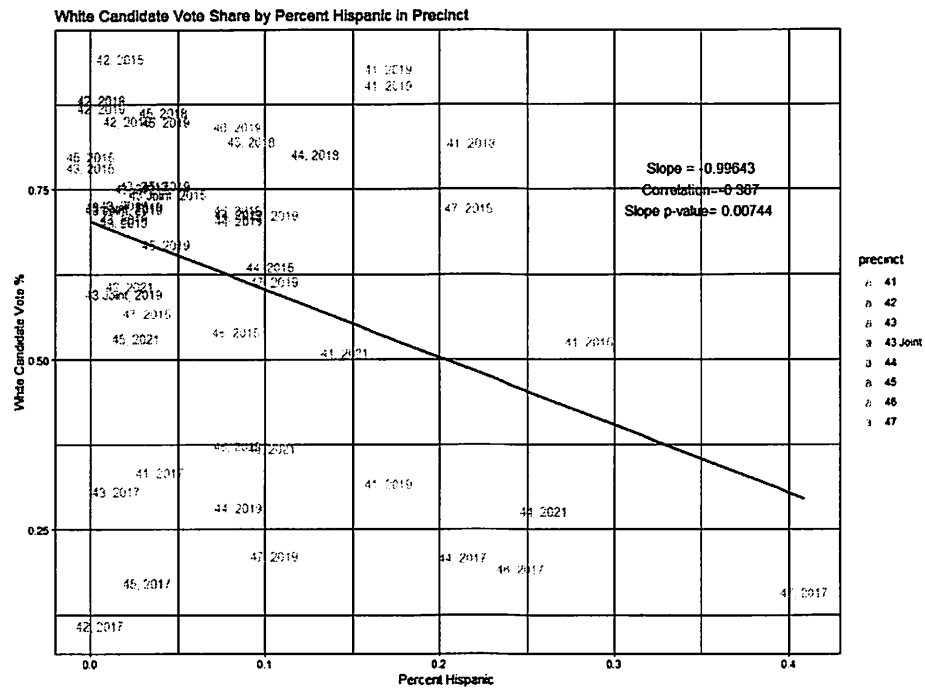
Figures 1-4 report the proportion of vote cast for the White candidate, minority-preferred candidate (i.e., Hispanic surname candidate), and the proportion of vote Hispanic and White in each precinct in all elections. Hispanic surname candidates are identified as the minority-preferred candidate. A minority-preferred candidate appeared on the ballot in seven of ten contests. The findings confirm significant ( $p < .05$ ) racially polarized voting for White and Hispanic voters.

*Fig 1: The proportion of vote cast for white candidate and Share of vote White*

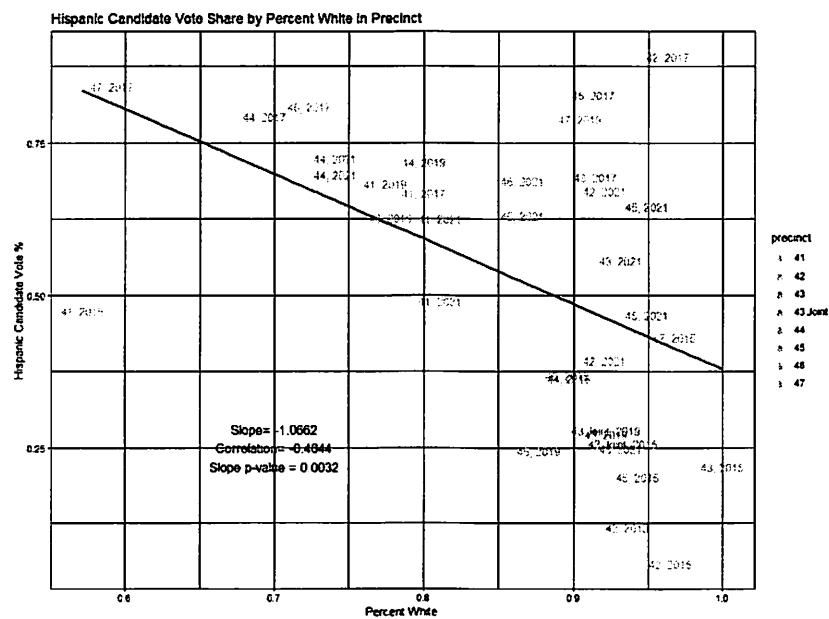


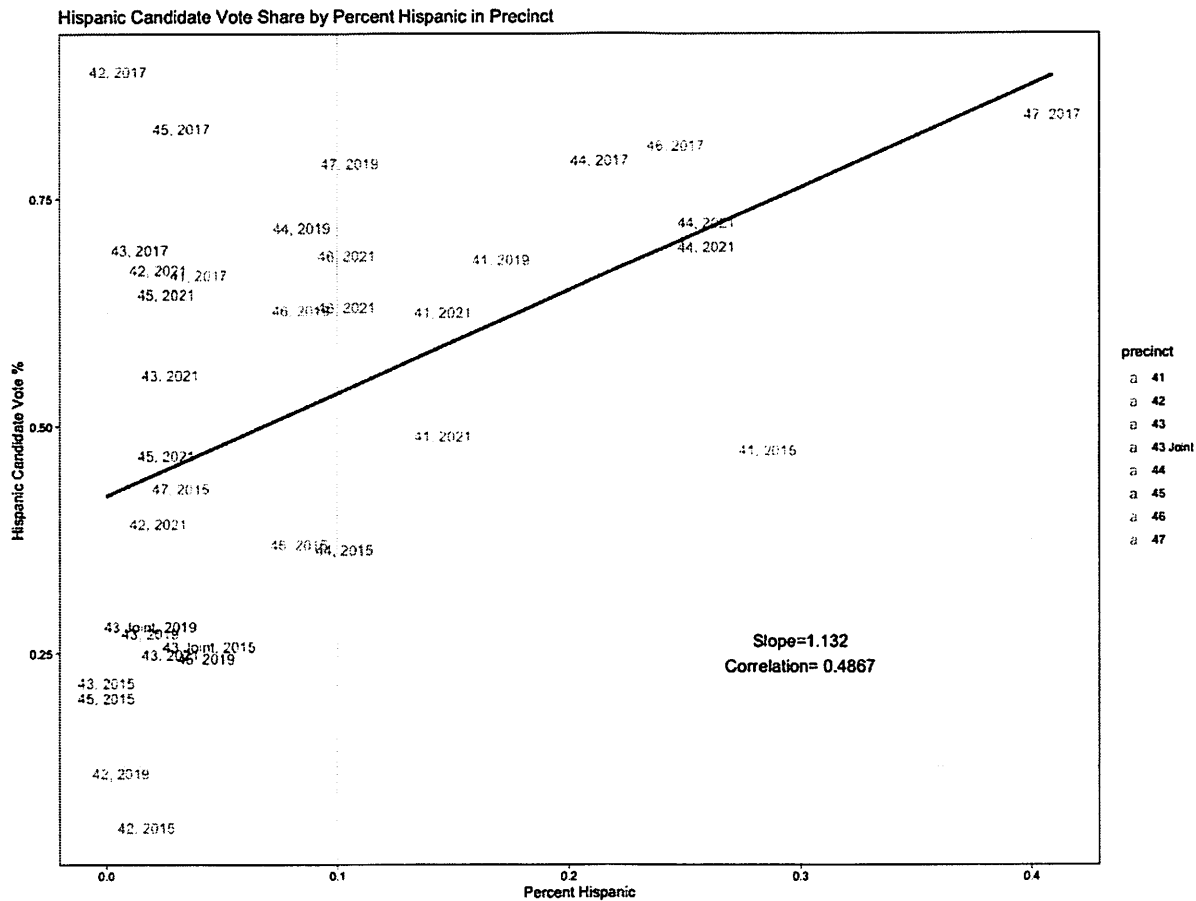
<sup>1</sup> Ordinary least squares regression.

**Fig 2: The proportion of vote cast for white candidate and Share of vote Hispanic**



**Fig 3: The proportion of vote cast for Hispanic candidate and Share of vote White**



*Fig 4: The proportion of vote cast for Hispanic candidate and Share of vote Hispanic*

## V. Compactness of Hispanic citizen voting age persons in SBISD

Table 1 reports the number and proportion of citizen voting age by race and ethnicity for the seven proposed voting districts in SBISD. These data are from the 2020 U.S. Census and the American Community Survey 2015-2019 and best approximate that the likelihood that at least one or more majority Hispanic trustee districts can be constructed. More than half (52.8%) of the citizen voting age population in proposed district 1 is sufficient to enable Hispanic voters to elect a candidate of their choice i.e., an Hispanic.

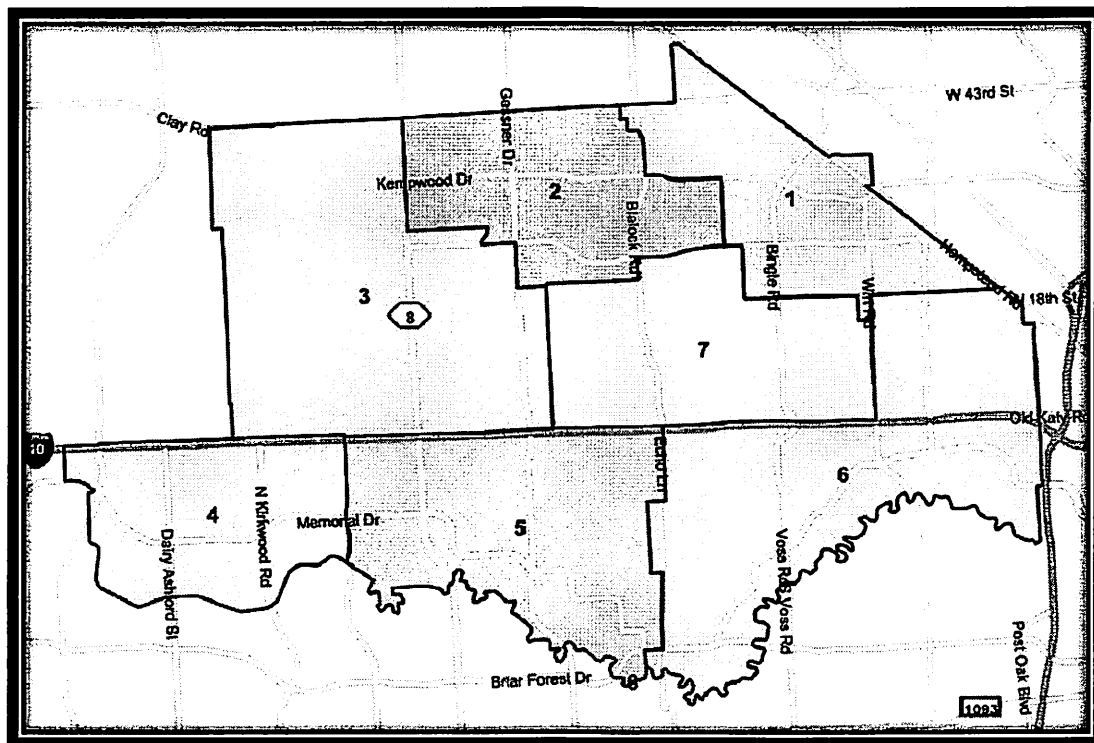


Table 1  
Citizen Voting Age Population by SBSID Voting District

District	Total Population	Voting Age Population	Citizen Voting Age Population	% Hispanic Citizen Voting Age Population
1	26,171	18,782	9,180	52.8
2	26,131	19,802	14,355	30.7
3	26,132	19,732	14,345	32.5
4	26,432	19,164	14,180	17.4
5	26,110	19,429	16,235	9.5
6	26,194	20,493	18,450	15.4
7	26,194	19,091	12,535	31.1

Under the proposed configuration of voting districts in SBISD there is sufficient evidence to show that at least one single member majority Hispanic trustee district can be created. There may be other configurations of voting districts that could yield more than one majority Hispanic trustee districts.

#### Demonstrative Spring Branch ISD Single-Member District



## VI. Racial and ethnic segregation in SBISD

The ethnic makeup of the district's seven election/enrollment districts is heavily skewed. Four districts (i.e., Landrum, Northbrook, Spring Oaks and Spring Woods) are overwhelmingly comprised of Hispanic students, with an average of 87% of students in these election/enrollment districts Hispanic. In the remaining three election/enrollment districts (Memorial, Spring Branch and Spring Forest) between 42% and 52% of the student are white.

I have measured segregation of SBISD students using the index of dissimilarity between whites and Hispanics at the school and enrollment zone level. The index is equal to:

$$\frac{1}{2} \sum_{i=1}^N \left| \frac{w_i}{W} - \frac{l_i}{L} \right|,$$

where  $w_i$  and  $l_i$  represent the number of whites and Latinos in school  $i$  respectively,  $W$  and  $L$  represent the total number of whites and Latinos in the district, respectively and  $N$  represents the total number of schools (enrollment zones) in the district. Information on the racial and ethnic makeup of SBISD schools comes from National Center for Education Statistics<sup>2</sup>.

The dissimilarity index captures how proportional Hispanics and whites are distributed across schools and enrollment zones. For example, SBISD is comprised of 26.7% white students 59.2% Hispanic students.<sup>3</sup> Given these district-wide distributions, one would expect every school and/or enrollment zone would have the same proportion of students Hispanic and white if the district was not segregated or was fully integrated. Another way to think about the dissimilarity index is the proportion of Hispanic (white) students who would have to move to a different school or enrollment zone in order for the composition of each school or enrollment zone to be identical to the composition of the district as a whole.

Researchers (Abbott and Magazinnik 2020; Massey and Denton 1993; Ananat 2011; Collins and Margo 2000; Cutler and Glaeser 1997; Cutler, Glaeser and Vigdor 1999) identify dissimilarity index scores below .3 as indicating low levels of segregation, .3 to .6 as moderate levels of segregation and .6 and above as high levels of segregation. SBISD's dissimilarity index score at the school level is .694 and .596 at the enrollment zone level. These scores suggest that well over half of the Hispanic students enrolled in SBISD schools would have to move to another school in order to achieve an integrated distribution of students by ethnicity.

Table 2 reports the proportion of students by enrollment zone in SBISD by race and ethnicity. In four of the districts seven enrollment zones 78% or more of the students are Hispanic. In the

<sup>2</sup> Source: [https://nces.ed.gov/ccd/schoolsearch/school\\_list.asp?Search=1&DistrictID=4841100](https://nces.ed.gov/ccd/schoolsearch/school_list.asp?Search=1&DistrictID=4841100)

<sup>3</sup> The remaining proportion of the SBISD students at Asian (5.9%), Black (4.8%), and two or more races (2.3%).

remaining three enrollment zones 42% to 52% of the students are White. There is strong evidence that the racial and ethnic makeup of SBISD schools and enrollment districts is high segregated

Table 2 Percent Enrollment by Race/Ethnicity

Enrollment Zone	% White	% Hispanic
Northbrook Middle	0.02	0.96
Spring Woods Middle	0.05	0.88
Spring Oaks Middle	0.07	0.85
Landrum Middle	0.13	0.78
Spring Forest Middle	0.42	0.36
Spring Branch Middle	0.47	0.36
Memorial Middle	0.52	0.25

## VII. Recommendations

The degree of racial segregation and voter polarization in SBISD supports the plaintiff's request that future SBISD trustee elections be held with a single member district plan of representation. The district currently has seven board members and elections are conducted in seven precincts corresponding to the district's enrollment districts. Using a single member district plan to elect trustees will most likely result in the election of at least one school board trustee reflecting the preferences of SBISD's Hispanic voters, and likely more.

## VIII. Minority representation in at-large and single member systems

How we elect our legislative representatives has long been a prominent subject of study. A core research question in this field of study is whether the method of election discriminates against representation of non-majority populations including racial and ethnic minorities. In the United States, the two most popular ways for electing our representatives are single member district and at-large elections. In at-large elections, voters across an entire jurisdiction (e.g., city, county, school district) have the opportunity to select from among contesting candidates for every available seat in the governing body. Alternatively, single member district representation divides the jurisdiction into separate precincts/wards each with its own seat in the legislative/governing body.

Opponents of at-large representation claim that majority interests, voting in a bloc, dilute minority votes. When minorities are concentrated in particular areas such that they comprise a majority, switching to single member district representation can afford minorities representation in the legislative body. Properly configured, single member district representation can produce representation for minorities proportionate to their representation in the jurisdiction. For example, if a minority group comprises 20% of the adult voting age population in a school district, it is more likely that 20% of the legislative body will be comprised of members preferred by the minority group with single member district elections than at-large elections.

Though the vast majority of empirical research demonstrates that single district representation results in greater and more proportional representation for Black and Hispanic voters (Davidson

and Grofman 1994; Davidson and Korbel 2981; Engstrom and McDonald 1981; Karnig and Welch 1982; Leal, Martinez-Ebers and Meier 2004; Marschall, Ruhil, and Shah 2010; Meier et al 2005; Molina Jr and Meier 2018; Moncrief and Thompson 1992; Polinard 1994; Robinson and England 1981; Stewart, England and Meier 1989; Trounstone and Valdin 2008; Abbot and Magazinnik 2020), several studies, have reported null findings (Bullock and MacManus 1987; Cole 1974; MacManus 1978; Welch 1990; Leal, Martinez-Ebers and Meier 2004<sup>4</sup>). Two studies have reported a negative relationship between single member district elections and minority representation (Meier and Rutherford 2014; Welch and Karnig 1978).

Two factors explain the lack of unanimity in the scholarly literature on the effect of single member district representation on minority representation. The first is the contingent nature of electoral reform on minority representation and the second is the challenge researchers face in making reliable and valid casual inferences and estimates of this effect. Single member district elections can succeed in electing minority-preferred candidates when the minority population is sufficiently large and geographically concentrated such that it constitutes a majority in the area they occupy, as is the case in SBISD. Most studies compare the representation of minority populations among single member and at-large systems of representation without consideration of how and why these different forms of representations were first adopted, thus omitting unobserved differences between jurisdictions with long histories of at-large representation.

Abott and Magazinnik (2020) identify two contingencies which condition the positive effect of single member district representation has on minority representation. “[T]he voting population be segregated enough for the minority group to constitute a local majority in at least one ward, and that the political boundaries be drawn accordingly (2020:719).” A second condition is that the district must be of sufficient size to attract candidates to run for office.

Studies by Abott and Magazinnik (2020), Marschall, Ruhil and Shah 2010) and Trounstone and Valdin (2008) all employ contingent effects of minority group size and segregation when estimating the effects of changing from at-large to single member district representation on minority representation. These scholars all report significant gains in minority representation, albeit for different genders, races and ethnicities in city councils and school districts with single member district representation and where the same changed from at-large to single member district representation.

To date, the strongest empirical evidence supports the thesis that the likelihood of proportional representation of racial and ethnic minorities on legislative bodies is greater with single member districts than at-large elections when district size is large and minority group size is sufficiently large and segregated. Abott and Magazinnik note “When all of these conditions are met, the positive impact of reform is striking, exceeding one additional officeholder for every three available seats (730).” When these conditions are not met, however, moving from an at-large to single member system of representation was found to have a null or even negative effect on

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<sup>4</sup> The authors qualify their null findings by noting that Hispanics “may be able to profit from at-large districting when they are a majority of the population (2004:1241).” In non-majority Hispanic settings, Hispanic representation does not benefit from at-large districting.

minority representation, accounting for “why a large and active academic literature ...has produced so many conflicting findings (731).”

The scholarly literature supports the following conclusions:

- Single member district representation increases the likelihood that minority candidates will contest elections for positions on legislative bodies.
- Single member district forms of representation enhances proportional representation of minority candidates on legislative bodies.
- Single member district representation will produce policies more responsive to the preference of minority voters.

#### **IX. The taxing and spending policies of governments with at-large and single member district representation**

A purported advantage of at-large over single member district elections is that elected single member district representatives trade off the virtues of public goods against the attractiveness of spending on particularistic goods (‘pork’) benefitting voters in their home or single member districts. In at-large systems, representatives are thought to voice the preferences of the average (median) resident throughout the entire jurisdiction. In single member systems, the representative better expresses the preferences of the average resident within a specific geography. Assuming preferences vary by geography, at-large systems work to pull the tails of the preference distributions inward, reducing the representation of diverse preferences. A potential consequence of this presumed effect of at-large representation is to under represent (and under value) non-majority voters’ preferences.

At the federal level Mayhew’s seminal work (1974) established the logic underlying higher spending and taxing in governments with single member district representation. Mayhew and subsequently Sheplse, Weingast and Johnson (1981) argued that representatives elected from single member districts had a strong incentive to extract distributive<sup>5</sup> spending benefits for their constituents to enhance their re-election. A system of log rolling in which single member district representatives agreed to support each other’s district specific spending priorities produced an inefficient level of spending and taxing i.e., produce more taxing and spending than might occur with an at-large system of representation. By implication, the level of spending and taxing was assumed lower in legislative bodies with at-large representation, where the electoral benefits of distributive taxes and concentrated spending are not available.

Empirical support for a significant and positive relationship between spending and the electoral fortunes of single member district representatives has been mixed, modest and conditional. Most research has been unsuccessful in corroborating a significant relationship between spending allocations to single member district congressional representatives (Bickers and Stein 2000). The prevailing finding is the electoral connection is conditional on incumbent’s electoral vulnerability,

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<sup>5</sup> Distributive spending refers to outlays concentrated to specific rather than generalized recipients, often defined by geography and which is funded by taxes levied on all persons inside and more importantly outside the area in which the spending benefits are located. An example of distributive spending is infrastructure projects located in specific areas of a jurisdiction and not readily accessible to persons not living in the immediate area.



a rare condition and related to grant awards, not the amount of money flowing to the district (Stein and Bickers 1994).

Research on the spending and taxing policies of subnational governments does not demonstrate significant differences between jurisdictions with at-large and single member representation (Morgan and Pelissero 1980; Lineberry and Fowler 1967; Langbein, Crewson and Brasher 1997; Farnham 1990). In a few instances, (Zax 1990; Deno and Mehay 1987) researchers have found that cities with at-large elections spend more on municipal employees than cities with single member district representation. The few studies that did find significantly higher spending in cities with single member representation (Southwick 1997; Dalenberg and Duffy-Deno 1991) used weaker cross sectional research designs with limited controls for factors that shape municipal taxing and spending policies, including state laws,<sup>6</sup> the range of goods and services provided<sup>7</sup> and most importantly citizens' preferences for spending. These studies fail to take into account that the adoption of at-large or single member district systems is related to the same factors shaping spending and taxing decisions.

The research on spending and taxing among governments with different modes of representation presumes that the higher levels of spending governments in jurisdictions with single member district representation is both inefficient and non-representative of the preferences of the full community. Though spending and taxing may be higher in single member district governments this finding does not suggest anything other than that citizens in these jurisdictions prefer higher spending. In the next section of my report I turn to this question asking whether single member or at-large modes of representation better represent the interest of citizens, both majority and minority citizens.

#### **X. The representation of policy preferences among jurisdictions with different modes of representation**

Tausanovitch and Warshaw's research (2014) ask whether different modes of representation provide for better representation of public preferences. Using a unique database that measured public preferences for spending and tax policies among every U.S. city and town over 20,000 in population (N=1,600) the authors estimate whether the taxing and spending policies of these communities match citizen preferences by mode of representation.<sup>8</sup>

Drawing upon previously discussed explanations for spending and taxing among at-large and single member district systems of representation the authors hypothesized that *cities with at-large districts are more responsive to citizens' policy preferences than cities with single-member districts*. The authors' design was sufficiently rigorous to correct many of the deficiencies in previous research that produced mixed findings about the relationship between spending and

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<sup>6</sup> Many states mandate minimum spending and service content for the goods and services their municipalities provide their citizens, independently influencing spending. Tax limits imposed by states on cities and school districts further shape spending.

<sup>7</sup> Cities differ significantly on the number and scope of goods and services they provide their constituents (Peterson 1991). The repertoire of goods and services is itself a function of the constituent preferences, constituents' ability to pay for these goods and services as well as how these goods and service are produced (Stein 1991).

<sup>8</sup> The authors constructed a measure of public preferences for taxing and spending across a large number public policies e.g., public employee pensions, recycling, health care and bans on smoking in bars and restaurants.

alternative modes of representation. The authors conclude: “our findings provide no support .... that at-large districts lead to better representation (2014: 621).”

A great number of minority school board members, in either at-large or single member districts elections, should produce policies favored by minorities. Multiple studies suggest greater minority representation on school boards translates into outcomes that are more positive for minority students (Meier, Stewart and England 1989; Reyes, Scribner and Schribner 1999; Spring 2000; Leal and Hess 2000; Rocha and Wrinke 2011; Theobold 2007; Leal, Martinez-Ebers and Meier 2004). Robinson (2016), however, finds that a great proportion of Hispanic board members leads to *less* support for bilingual policies, popular among Hispanic voters. Flink and Molina (2016) find the level of Hispanic representation has a positive effect on bilingual education spending only when the proportion of bilingual population in the district is relatively small. Is the relationship between minority representation and policies preferred by minorities stronger under single member district or at-large elections?

Leal et al (2004) asked whether greater Latino representation on school boards with single member rather than at-large elections nets great Latino representation among the district’s teachers and administrators. They find that “at-large elections negatively influence Latino educational representation, which produces a ripple effect that ultimately reduces the share of Latino teachers (2004:1224).”

“Latino representation on school boards is significantly associated with increases in the percentage of Latino administrators, and the percentage of Latinos in administration is the most important variable determining the presence of Latino teachers. As we know the Latino community wants more Latinos teaching their children, greater Latino school board representation is therefore more likely to lead to education policies congruent with community wishes (2004:1242).”

Leal et al (2004) also uncover an important condition governing the link between single member district election, proportional minority representation on school boards and minority supported educational policies. “[W]hen Latinos are a minority in the population, the population-representation relationship is non-linear, with larger percentages getting significantly more representation than smaller percentages (2004: 1234).” This finding suggests the etiology pro-minority policies under single member district elections with proportional minority representation is conditional on the size of the minority population

McBrayer (2020) builds on Leal et al findings and suggests descriptive representation (i.e., minority board members) does not always lead to substantive policy representation. Instead McBrayer hypothesizes that this relationship is conditioned on the mode of representation i.e., single member versus at-large. She specifically looks at the provision of bilingual education services among at-large and single member district school districts in Texas school districts. McBrayer finds that different modes of representation are better at translating minority representation into substantive policies when demand for these policies varies. Specifically McBrayer finds:

- Hispanic representatives have a positive effect on bilingual funding allocation when the entire board serves single-member districts, suggesting that this specific electoral arrangement strengthens the relationship between descriptive and substantive representation.
- Hispanic representatives in at-large electoral systems allocate more bilingual funding proportion only when there are small portions of qualifying students.
- Hispanic representatives in at-large systems have a negative effect on bilingual allocation when there are large portions of qualifying students.

“This suggests that schools with the least demand for bilingual funding are best represented by minority officials in at-large systems, yet schools with the most demand are underrepresented by minority officials. Thus, in both electoral scenarios, Hispanic representatives substantively represent campuses with low demand for bilingual programming, which is congruent with Flink and Molina’s (2016) findings. Only Hispanic officials in single-member districts substantively represent campuses with high demand for bilingual programming, congruent with theoretical expectations (McBrayer 2020:1689-1690).”

The extant literature on the representation of minority policy preferences shows that descriptive representation (i.e., proportional minority representation on school boards) is a necessary but not sufficient condition for fulfilling the policy preferences of minority constituents. This policy connection for minority interests is significantly enhanced with single member district elections rather than at-large elections.

A single-member plan for SBISD would likely strongly improve bilingual and other educational outcomes critical for Hispanic students. In addition, a single-member districting plan for SBISD will increase the responsiveness of school board trustees to minority and low-income students, minority voters and minority educators.

I state under penalty of perjury that the foregoing is true and correct.

Executed on January 20, 2022.

*Robert Stein*

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Robert M. Stein



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CURRICULUM VITAE  
January, 2021

ROBERT M. STEIN  
Lena Gohlman Fox Professor of Political Science  
Rice University  
Houston, Texas 77251  
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Place of birth: New York, NY

Married, two children

**Education**

B.A., Ohio Wesleyan University, Delaware, Ohio, 1972.

M.A., University of Wisconsin-Milwaukee, Milwaukee, WI, 1974

Ph.D., University of Wisconsin-Milwaukee, Milwaukee, WI, 1977

**Fields of Specialization**

Elections and election administration, Federalism and intergovernmental relations, state and local government, urban politics and public policy.

**Teaching Positions**

Lena Gohlman Fox Professor of Political Science, 1996

Fellow, James A. Baker III Institute for Public Policy, 2006

Professor, Department of Political Science, Rice University, 1989-1996

Visiting Associate Professor and research scientist, Workshop in Political Theory-Public Policy and Department of Political Science, Indiana University, 1987-1988

Associate Professor, Department of Political Science, Rice University, 1983-1989

Assistant Professor, Department of Political Science, Rice University, 1979-1983

Assistant Professor, University of Georgia, 1977-1978

**Administrative positions**

Faculty Director, Center for Civic Engagement, Rice University 2007-2021

Dean, School of Social Sciences, Rice University, 1996- 2006

Interim Dean, School of Social Sciences, Rice University, 1995-1996

Chair, Department of Political Science, Rice University, 1994-1995

Director, Policy Studies Program (undergraduate major), Rice University, 1987-1995

Director, Graduate Studies, Department of Political Science, Rice University, 1987

Chair, Department of Political Science, Rice University, 1984-1986

Director, Rice Institute of Policy Analysis Public Opinion Poll, 1983-present

Political analyst, KHOU-TV, Houston, TX, 1983-present

**Fellowships, awards, and offices**

Outstanding reviewer award, *Political Research Quarterly*, 2010.

Best paper award on Federalism and Intergovernmental Relations for “Inter-Local Cooperation and the Distribution of Federal Grants,” by the section on Federalism and Intergovernmental Relations, American Political Science Association, 2004 (with Kenneth Bickers).

President, Urban Politics Subsection, American Political Science Association, 1999-2000.

Recipient, George R. Brown Award for Superior Teaching, Rice University, 1998.

President, Southwestern Political Science Association, 1998.

Recipient, Outstanding Mentor of Women in Political Science Award, Women’s Caucus for Political Science, American Political Science Association, 1996.

Special book award from the Urban Politics and Policy Section of the American Political Science Association for *Urban Alternatives: Private and Public Markets in the Provision of Local Services*, 1991.

Research fellowship, Indiana University, Workshop in Political Theory and Public Policy, 1987-1988.

Recipient, George R. Brown Award for Superior Teaching, Rice University, 1987.

Fellowship, U.S. Advisory Commission on Intergovernmental Relations, 1978-1979.

**Research Grants and Contracts**

Measuring and improving the impact of using stadiums and arenas for voting. Funded by New Venture Fund. 8/1/2021-2/28/2022. Co-PI, \$125,350.

The integrity of mail-in voting in the 2020 Election. Funded by the National Science Foundation (2105671), 12/1/2020-11/30/2020. PI, \$120,283.

Optimizing vote-by-mail implementations on consumer grade equipment. Funded by the National Science Foundation (2033923), 7/1/2020-6/30/2021. Co-PI, \$200,000.

Making voting safe for voters and poll workers: Meeting the challenge of the COVID-19 Virus. Funded by Rice University, COVID-19 Initiative, 5/1/2020-12/31/2020. PI, \$45,300.

Election Day Vote Centers in Harris County, Texas. Funded by the Arnold Foundation, May 2019-December 2020, \$100,000.

Hurricane Harvey: Longitudinal Survey. Funded by the National Science Foundation, January 2018 – December 2021 (SBER1760292). Co-PI, \$200,000.

Urban Flooding: Identifying where it floods and evaluating remedies. May 2018-September 2019. Funded by the Kinder Institute, Ken Kennedy Institute and Office of Research, Rice University. Co-PI, \$74,450.

2016 City of Houston Citizen Survey, September 2016-January 2017. Funded by the City of Houston, \$23,500.

Vote by mail, September 2014-September 2015. Funded by The Pew Charitable Trusts, \$48,000.

Saturday Run-off Election Exit Poll Survey, City of Houston, October-November, 2013. \$4,000.

Prioritizing and selecting bridge management actions for heightened truck loads and natural hazards in light of funding allocation patterns. Funded by the National Science Foundation, September 2012-August, 2015. Co-PI, \$1.2 million.

Phase 2, Development and enhancement of online storm risk calculator tool for public usage, City of Houston, Office of Public Safety and Homeland Security, November, 2012-June 2013. Co-PI, \$189,000.

NetSE: Large Urban-Scale Polymorphic Wireless Networks: Community-Driven Assessment, Design and Access. Funded by the National Science Foundation, September 2010-2013. Co-PI, \$1.9 million.

Development and enhancement of online storm risk calculator tool for public usage, City of Houston, Office of Public Safety and Homeland Security, January, 2011-June 2011. Co-PI, \$309,000.

Increasing turnout among the less engaged: A study of Election Day vote centers. Funded by The Pew Charitable Trusts, September, 2007-May, 2009. PI, \$260,000.

Independent Response of Complex Urban Infrastructures Subjected to Multiple Hazards, National Science Foundation, October 2007–October 2010. Co-PI, \$20,000.

Program evaluation, City of Houston, SAFEclear, traffic incident management program, July 2006-January 2008. PI, \$20,000.

Program evaluation, City of Houston, SAFEclear, traffic incident management program, February 2005-December 2005. PI, \$20,000.

Program Utilization Among Households Eligible for Head Start Enrollment, funded by the Harris County Department of Education, June, 2001. PI, \$15,000.

The Changing Structure of Federal Aid and the Politics of the Electoral Connection. Funded by the National Science Foundation, 2001-2002 (SES0095997). January 2001-January 2003. PI, \$230,000.

Greater Harris County 9-1-1 Emergency Network Data Archive and Analysis, January 2000-January 2001. PI, \$15,000.

Evaluation of Greater Harris County Emergency Network: Round II. Funded by the Greater Harris County Emergency Network, September, 1993-January, 1994. PI, \$5,000.



Evaluation of Greater Harris County 9-1-1 Emergency Network. Funded by the Greater Harris County Emergency Network, January 1992-July 1993. PI, \$5,000.

Selective Universalization of Domestic Public Policy. Funded by the National Science Foundation (SES8921109) 1990-1992. PI, \$185,000.

Contracting for Municipal Services. Funded by the U.S. Advisory Commission on Intergovernmental Relations. 1986-1990. PI.

The Fiscal Austerity and Urban Innovation Project. Funded by the U.S. Department of Housing and Urban Development. 1983-1985. PI.

Research Associate, Field Network Evaluation Study of the Reagan Domestic Program. Princeton Urban and Regional Center, Princeton University. Funded by the Ford Foundation. 1982-1984. PI.

Research Associate, Field Network Evaluation Study of the Community Development Block Grant: Round 8. Funded by the U.S. Department of Housing and Urban Development. Summer 1982. PI.

The Structural Character of Federal Grants-in-Aid. Funded by the U.S. Department of Housing and Urban Development. 1982-83. PI.

The Allocation of Federal Grants-in-Aid. Funded by the U.S. Advisory Commission on Intergovernmental Relations. 1979-1981. PI.

The Allocation of State-Local Aid: An Examination of Within State Variation. Funded by the U.S. Advisory Commission on Intergovernmental Relations. 1979-1981. PI.

#### **Editorial Positions**

Editorial board member, *Journal of Election Technology and Systems*, 2013-2016

Editorial board member, *American Political Science Review*, 2001- 2007

Executive Committee, American Politics, *American Political Science Review*, 2004-2007

Editorial board member, *American Journal of Political Science*, 1994-1998

Editorial board member, *Journal of Politics*, 1994-1998

Editorial board member, *Social Science Quarterly*, 1993-present

Editorial board member, *State and Local Government Review*, 1987-1992

Editorial board member, *Urban Affairs Review* (formerly *Urban Affairs Quarterly*), 1996- 2000

Referee, *American Political Science Review*, *American Politics Quarterly*, *Journal of Urban Affairs*, *Urban Affairs Quarterly*, *Publius*, National Science Foundation

#### **Books**

*Perpetuating the Pork Barrel: Policy Subsystems and American Democracy*, Cambridge University Press, 1995, with Kenneth N. Bickers.



*Federal Domestic Outlays, 1983-1990.* 1991. M.E. Sharp, with Kenneth N. Bickers

*Urban Alternatives: Public and Private Markets in the Provision of Local Services.* 1990 Pittsburgh Press.

### Articles

"Recruiting Persons to Work the Polls," 2021. *Election Law Journal*, 30:315-326. With Colin Jones. <https://www.liebertpub.com/doi/10.1089/elj.2020.0701>.

"How to Measure and Assess the Turnout Effects of Election Reforms." 2020. *Journal of Political Institutions and Policy Economy*, 1:1-28. With Andrew Menger. <http://dx.doi.org/10.1561/113.00000009>

"How Human Factors Can Help Preserve Democracy in the Age of Pandemics." 2020. *Human Factors*, 62(4):1077-1086. With Philip Kortum, Claudia Zeigler Aceyman, Elizabeth Vann and Dan Wallach. <http://DOI: 10.1177/0018720820946896>

"Choosing the less convenient way to vote: An anomaly in vote by mail elections." 2020. *Political Research Quarterly*, 73:196-207. With Andrew Menger. <https://journals.sagepub.com/doi/full/10.1177/1065912919890009>

"Waiting to vote in the 2016 Presidential Election: Evidence from a multi-jurisdiction Study." 2019. *Political Research Quarterly*, 73:439-453. With Charles Stewart, Christopher Mann and others. <https://journals.sagepub.com/doi/full/10.1177/1065912919832374>

"This Way Out." 2018. *Scientific American*, October 18, pp. 76-79. With Leonardo Dueñas-Osorio and Devika Subramanian.

"Pedagogical Value of Polling-Place Observation by Students." 2018 *PS: Political Science & Politics*. 51:831-837. With Christopher B. Mann, , Gayle A. Alberda, Nathaniel A. Birkhead, Yu Ouyang, Chloe Singer, Charles Stewart, Michael C. Herron, et al. <https://doi.org/10.1017/S1049096518000550>.

"Reducing the undervote with vote by mail." 2018. *American Politics Research*, 46(6):1039-1064. With Andrew Menger and Greg Vonnahme. <https://doi.org/10.1177/1532673X17737059>

"Enlisting the public in facilitating election administration: A field experiment." 2018. *Public Administration Review*, 78(6):892-903. With Andrew Menger. <https://doi.org/10.1111/puar.12833>

"Survey Experiments with Google Consumer Surveys: Promise and Pitfalls for Academic Research in Social Science." 2016. *Political Analysis*, 24(3):256-373. With Philip Santaso and Randolph Stevenson. <https://doi.org/10.1093/pan/mpw016>

"Election Administration During National Disasters and Emergencies: Hurricane Sandy and the 2012 Election." 2016. *Election Law Journal*, 14:1-8. <http://doi.org/10.1089/elj.2014.0271>

"The social and private benefits of preparing for natural disasters." 2014. *International Journal of Mass Emergencies and Disasters*, 32:459-483. With Birnur Buzcu-Guven, Leonardo Dueñas-Osorio, and Devika Subramanian. <http://www.ijmed.org/articles/664/download/>

"Building and validating geographically refined hurricane wind risk models for residential structures." 2014. *Natural Hazards Review*, 15(3):1-10. With Devika Subramanian, Leonardo Dueñas-Osorio, and Josue Salazar. [https://doi.org/10.1061/\(ASCE\)NH.1527-6996.0000130](https://doi.org/10.1061/(ASCE)NH.1527-6996.0000130)

"How risk perceptions influence evacuations from hurricanes and compliance with government directives." 2013. *Policy Studies Journal*, 41(2):319-341. With Birnur Buzcu-Guven, Leonardo Dueñas-Osorio, Devika Subramanian, and David Kahle. <https://doi.org/10.1111/psj.12019>

- "Early voting and campaign news coverage." 2013. *Political Communication*, 30:278-396. With Johanna Dunaway. <https://doi.org/10.1080/10584609.2012.737420>
- "The effect of election day vote centers on voter participation." 2012. *Election Law Journal*, 11(4):291-301. With Greg Vonnahme.
- "Where, when and how we vote: Does it matter?" 2012. *Social Science Quarterly*, 93(3):693-712. With Greg Vonnahme.
- "Prospectus for the Future Administration of Elections." 2012. *Baker Center Journal of Applied Public Policy*, 4(1):45-57.
- "Engineering-based hurricane risk estimates and comparison to perceived risks in storm-prone areas." 2012. *Natural Hazards Review*, 13(1):1-12. With Leonardo Dueñas-Osorio, Devika Subramanian and Bimur Buzcu-Guven.
- "Voting at non-precinct polling places: A review and research agenda." 2011. *Election Law Journal*, 10:307-11. With Greg Vonnahme.
- "Interface network models for complex urban infrastructure systems." 2011. *Journal of Infrastructure Systems*, 17(4): 138-150. With James Winkler, Leonardo Dueñas-Osorio, Robert Stein, and Devika Subramanian.
- "Performance assessment of topological diverse power systems subjected to hurricane events." 2010. *Reliability Engineering and System Safety*, 95:323-336. With James Winkler, Leonardo Dueñas-Osorio and Devika Subramanian.
- "Who evacuates when hurricanes approach? The role of risk, information and location." 2010. *Social Science Quarterly*, 91:816-834. With Leonardo Dueñas-Osorio and Devika Subramanian.
- "Crunching collisions." 2009. *Roads and Bridges*, 13:2. With Robert Dahnke, Ben Stevenson, and Tim Lomax.
- "Voting technology, election administration and voter performance" 2008. *Election Law Journal*, 7:123-135. With Greg Vonnahme, Michael Byrne and Daniel Wallach.
- "Engaging the unengaged voter: Voter centers and voter turnout." 2008. *Journal of Politics*, 70:487-497. With Greg Vonnahme.
- "Assessing the Micro-Foundations of the Tiebout Model." *Urban Affairs Review*, 42:57-80. With Kenneth Bickers and Lapo Salucci.
- "Who is Held Responsible When Disaster Strikes? The Attribution of Responsibility for a Natural Disaster in an Urban Election." 2006. *Journal of Urban Affairs*, 28:43-54. With Kevin Arceneaux.
- "Voting for Minority Candidates in Multi-Racial/Ethnic Communities." 2005. *Urban Affairs Review*, 41:157-181. With Stacy Ulbig and Stephanie Post.
- "Inter-Local Cooperation and the Distribution of Federal Grant Awards." 2004. *Journal of Politics*, 66:800-22. With Kenneth Bickers.
- "Language Choice, Residential Stability, and Voting among Latino-Americans." 2003. *Social Science Quarterly*, 84:412-24. With Martin Johnson and Robert Wrinkle.

"Public Support for Term Limits: Another Look at Conventional Thinking." 2002. *Legislative Studies Quarterly*, 27:459-480. With Martin Johnson and Stephanie Shirley Post.

"Contextual Data and the Study of Elections and Voting Behavior: Connecting Individuals to Environments." 2002. *Electoral Studies*, 21:63-77. With Martin Johnson, W. Phillips Shively. Also appearing in *The Future of Electoral Studies*. Mark N. Franklin and Christopher Wlezien, eds. Oxford: Elsevier Press (2003).

"The Congressional Pork Barrel in a Republican Era." 2000. *Journal of Politics*, 62:1070-1086. With Kenneth Bickers.

"State Economies, Regional Governance, and Urban-Suburban Economic Dependence." 2000. *Urban Affairs Review*, 36:46-60. With Stephanie Shirley Post.

"Reconciling Context and Contact Effects on Racial Attitudes." 2000. *Political Research Quarterly*, 53:285-303. With Stephanie Shirley Post and Allison Rinden.

"The Micro Foundations of the Tiebout Model." 1998. *Urban Affairs Review*, 34:76-93. With Kenneth Bickers.

"Early Voting." 1998. *Public Opinion Quarterly*, 62:57-70.

"Voting Early, But Not Often." 1997. *Social Science Quarterly*, 78:657-677. With Patricia Garcia-Monet.

"Building Majority Coalitions for Sub-Majority Benefit Distributions." 1997. *Public Choice*, 91:229-249. With Kenneth Bickers.

"The Electoral Dynamics of the Federal Pork Barrel." 1996. *American Journal of Political Science*, 40:1300-1326. With Kenneth Bickers.

"Privatization and the Arrangement of City Services." 1996. *Estudios De Economia*, 23:323.

"A Portfolio Theory of Policy Subsystems." 1994. *Administration and Society*, 26:158-184. With Kenneth Bickers.

"Congressional Elections and the Pork Barrel." 1994. *Journal of Politics*, 56:377-399.

"Explaining State Aid Allocations: Targeting Within Universalism." 1994. *Social Science Quarterly*, 75:524-540. With Keith E. Hamm.

"Universalism and the Electoral Connection: A Test and Some Doubts." 1994. *Political Research Quarterly*, 47:295-318. With Kenneth N. Bickers.

"Response to Weingast's 'Reflections on Distributive Politics and Universalism.'" *Political Research Quarterly*, 47:329-334. With Kenneth N. Bickers.

"Arranging City Services." 1993. *Journal of Public Administration: Research and Theory*, 3:66-93.

"Alternative Means of Delivering Municipal Services: 1982-1988." 1993. *Intergovernmental Perspective*, 19:27-30.

"A Federalist Explanation of Municipal Elections." *The Midsouth Political Science Journal*, 13:211-229. With Cheryl Young.

"The Budgetary Effects of Municipal Service Contracting: A Principal-Agent Explanation." 1990. *American Journal of Political Science*, 34:471-502.

"Economic Voting for Governor and U.S. Senator: The Electoral Consequences of Federalism." 1990. *Journal of Politics*, 52:29-54.

"Market Maximization of Individual Preferences and Metropolitan Municipal Service Responsibility." *Urban Affairs Quarterly*, 24:86-116.

"A Comparative Analysis of the Targeting Capacity of State and Federal Intergovernmental Aid Allocations: 1977-1982." *Social Science Quarterly*, 68:447-466. With Keith Hamm.

"Tiebout's Sorting Hypothesis." 1987. *Urban Affairs Quarterly*, 22:199-225.

"Federal Aid and The Mobilization of Black Political Influence." 1986. *Research in Urban Policy*, 2:97-117. With Keith Hamm.

"The Fiscal Impact of U.S. Military Assistance Programs, 1967-1976." 1985. *The Western Political Quarterly*, 38:27-43. With R. Stoll and M. Ishimatsu.

"Municipal Public Employment: An Examination of Intergovernmental Influences." 1984. *American Journal of Political Science*, 28:636-653.

"State Regulation and the Political Consequences of Municipal Fiscal Stress." 1984. *Publius*, 14:41-54.

"Implementation of Federal Policy: An Extension of the 'Differentiated Theory of Federalism.'" 1984. *Research in Urban Policy*, 3:341-348.

"The Structural Character of Federal Aid: An Examination of Fiscal Impact." 1984. *Research in Urban Economics*, 4:167-186.

"Trends and Prospects in State and Local Finance." 1983. *Journal of Urban Economics*, 14:224-241. With P. Mieszkowski.

"An Analysis of Support for Tax Limitation Referenda." 1983. *Public Choice*, 40:187-194. With K. Hamm and P. Freeman.

"The Political Economy of Municipal Functional Responsibility." 1982. *Social Science Quarterly*, 63:530-549.

"The Effects of Reagan Domestic Budget Cuts: The Case of Houston." 1982. *Texas Business Review*, 13:11-18. With S.A. MacManus.

"The Targeting of State Aid: A Comparison of Grant Delivery Mechanisms." 1981. *Urban Interest*, 2:47-59.

"The Allocation of Federal Aid Monies: The Synthesis of Demand-Side and Supply-Side Explanations." 1981. *American Political Science Review*, 75:334-343.

"Functional Integration at the Substate Level: A Policy Perspective." 1980. *Urban Affairs Quarterly*, 16:211-233.

"Federally Mandated Substate Regional Government: The Maintenance of Governmental Structures." 1980. *Urban Interest*, 1:74-82.

"Federal Categorical Aid: Equalization and the Application Process." 1979. *Western Political Quarterly*, 32:396-408.

"The Electability of Women Candidates: The Effects of Sex Role Stereotyping." 1979. *Journal of Politics*, 41:513-524. With R. Hedlund, K. Hamm, and P. Freeman.

"Regional Planning Assistance: Its Distribution to Local Governments and its Relationship to Local Grant Getting," 1977. *The Journal of the American Institute of Planners*, 43:871-891. With B. Hawkins.

**Chapters in edited volumes**

"Polling Place Quality," in *The Future of Election Administration*, Kathleen Hale and Bridgett A. King, eds., Palgrave. 2019: 83-100.

"Help America Vote Act of 2002" in *Voting and Political Representation in America: Issues and Trends*, Mark P. Jones, ed. Forthcoming, 2019. Santa Barbara, CA: ABC-CLIO

"Convenience modes of voting" in *Voting and Political Representation in America: Issues and Trends*, Edited by Mark P. Jones. Forthcoming, 2019. Santa Barbara, CA: ABC-CLIO

"Polling Place Practices," in *Electoral Performance*, Charles Stewart, III, and Barry Burden, eds. Cambridge University Press, 2014:166-187. With Greg Vonnahme.

"Early, Absentee, and Mail-in Voting," in *Handbook of American Elections and Political Behavior*, Jan Leighley, ed., Oxford University Press. 2010:182-199. With Greg Vonnahme.

"The Political Market for Intergovernmental Cooperation," in *Self-Organizing Federalism: Collaborative Mechanisms to Mitigate Institutional Collective Action Dilemmas*, Richard C. Feiock and John T. Scholz, eds. Cambridge University Press. 2010:161-178. With Kenneth N. Bickers and Stephanie Post.

"Local Services, Provision and Production," in *Encyclopedia of Public Administration and Public Policy*. Marcel Dekker, New York. 2003:734-748.

"The Politics of Revenue and Spending Policies," in *Cities, Politics, and Policy*. John Pelissero, ed., Washington, D.C., CQ Press. 2002:217-236.

"Implications for Citizen Participation," in *Choosing a President The Electoral College and Beyond*, Paul Schumacher and Burdette Loomis eds. New York, Catham House. 2002:125-142. With Paul Johnson, Daron Shaw and Robert Weissberg.

"Devolution and the Challenge for Local Governance," in *Change and Continuity in American State and Local Politics*, Ronald E. Weber and Paul Brace, eds. New York, Catham House. 2000:21-33.

"Contracting for Municipal Services," in *Privatization of the Justice System*, P. Seidenstat, S. Hakim and G. Bowman, eds. McFarland and Co. Publishers. 1992:82-107. With Delores Martin.

"Urban Public Policy Under Fiscal Stress: A Comparison of Spending and Employment Decisions," in *Cities Under Fiscal Stress*, Mark Gottdiner, ed. Sage. 1986:111-144. With M. Neiman and E. Sinclair.

"The Texas Response to Reagan's New Federalism Programs: The Early Years," in *Managing the New Federalism*, L. Bender and J. Stever, eds. Denver: Westview Press, 1986:124-159. With S.A. MacManus.

"Implementation of federal policy: An extension of the 'differentiated theory of federalism,'" in *Research in Urban Policy*, Terry Nichols Clark, ed. Chicago: JAI Press. 1985:341-348.

"Policy Implementation in the Federal Aid System: The Case of Grant Policy," in *Public Policy Implementation*, G. Edwards, ed. , JAI Press. 1984:125-155.

"The Allocation of State Aid to Local Governments: An Examination of Interstate Variations," pp. 202-225. in *The Federal Influence on State and Local Roles in the Federal System*, U.S. Advisory Commission on Intergovernmental Relations, U.S. Government Printing Office. 1982:202-225

"The Impact of Federal Grant Programs on Municipal Functions: An Empirical Analysis," in *The Federal Influence on State and Local Roles in the Federal System*, U.S. Advisory Commission on Intergovernmental Relations. U.S. Government Printing Office. 1981:65-122.

"The Impact of Socio-Economic Environment on Revenue Policies," in *The Politics of Raising State and Local Revenues*, R. Bingham, B. Hawkins, and F. Hebert, eds. Praeger, 1978:133-172. With R. Bingham, B. Hawkins, and R. Robertson.

"Grant Seeking and the Allocation of Federal Grant-in-Aid Monies: The Case of Southeastern Wisconsin," in *Milwaukee's Economy: Federal Programs, Local Resources and Community Action*, John P. Blair and Ronald S. Edari, eds. Federal Reserve Bank of Chicago. 1978:199-219,

"Substate Regionalism: Another View From the States," in *Substate Regionalism in the United States: Perspectives and Issues*, Charles Tyer, ed. University of South Carolina Press. 1978:69-102.

#### **Recent papers, completed manuscripts, conference papers and invited presentations**

"Choosing the less convenient way to vote: An anomaly in vote by mail elections," presented at Election Science Meeting, University of Pennsylvania, Philadelphia, PA. June 2019.

"Compositional effects of vote by mail elections," presented at VBMcon: A conference to discuss vote by mail election reform, Washington, D.C. June 20, 2019.

"Vote fraud and errant voting," invited presentation at the Department of Political Science, University of Nebraska, Lincoln, NE. April 25, 2013.

"Polling place practices," prepared for presentation at the Measure of Elections Conference, Massachusetts Institute of Technology, Boston, MA. June 18-19, 2012.

"Where, when and how we vote: Does it matter?" Presented at the Scottish National Election Commission, Strathclyde University, Glasgow, Scotland. November 12-15, 2010.

"The future of elections," presented at the Future of Governance Conference, Howard Baker Institute of Government, University of Tennessee, Knoxville, TN. October 14-15, 2010.

"Cost of elections," presented at the 2010 Meeting of the Midwest Political Science Association, Chicago, IL April 3-5, 2000. With Greg Vonnahme.

"Early voting and campaign news coverage," presented at the 2010 Meeting of the American Political Science Association, Washington, D.C. September 1-3, 2010.

"The cost of elections," prepared for The Pew Charitable Trusts. 2009. With Greg Vonnahme.

"The effects of early voting on congressional campaign expenditures." Presented at the 2009 Meeting of the Midwest Political Science Association, Chicago, IL. April 13-15, 2009. With Marvin McNeese.

"The effects of Election Day vote centers on voter experiences," presented at the 2008 Meeting of the Midwest Political Science Association, Chicago, IL. April 3-5, 2008. With Greg Vonnahme.

#### **Professional Associations**

President, Urban Subsection, American Political Science Association, 1999-2000

President, Southwest Political Science Association, 1997-1998

Chair, Nominations Committee, Southern Political Science Association, 1995



Nomination committee, Southern Political Science Association, 1993-1994  
 Executive Council, Southwest Political Science Association, 1992-1994  
 Chair, Nominations Committee, Southwest Political Science Association, 1993-1994  
 Section Head, State and Local Government, Southern Political Science Association Meetings, 1993  
 Section Head, State and Intergovernmental Relations, Midwest Political Science Association, 1992  
 Executive Board, Urban Politics Section, American Political Science Association, 1990-1992  
 Executive Board, Southwestern Political Science Association, 1985-1991, 1993-1994  
 Program Chair, Southwestern Political Science Association Annual Meetings, 1983  
 Section Head, Intergovernmental Relations, Southern Political Science Association Meetings, 1983

#### **Ph.D. Thesis advisees**

Albert Ellis, Ph.D. 1989. Associate Professor, University of Texas, Corpus Christi (deceased)  
 Stephanie Post, Ph.D. 1998. Director, Center for Civic Engagement, Rice University  
 Martin Johnson, Ph.D. 2002. Professor and Dean, Louisiana State University (deceased)  
 Gavin Dillingham, Ph.D. 2004. Research Scientist, Houston Advanced Research Center  
 Johanna Dunaway, Ph.D. 2006. Associate Professor, Texas A&M University  
 Gregory Vonnahme, Ph.D. 2009. Assistant Professor, University of Missouri-Kansas City  
 Marvin McNeese, Ph.D. 2015, Christian Bible University, Houston, TX  
 Andrew Menger, Ph.D. 2017. Vanderbilt University, Nashville, TN  
 Matthew Lamb, Ph.D. 2020. Austin Community College, Austin, TX

#### **Teaching**

Urban Politics (undergraduate)  
 Public Policy (graduate and undergraduate)  
 Bureaucracy and Public Policy  
 Policy Implementation  
 Federalism  
 Political Behavior

#### **Recent expert testimony**

Expert Report in *The League of Women Voters of Arkansas and Arkansas United et al v John Thurston in his official capacity as the Secretary of State of Arkansas, et al*, CASE NO. 60CV-21-3138 [Voting rights case in the state of Arkansas] December, 2021-January, 2022.

Expert Report in *Mark Wandering Medicine et al. v. Linda McCulloch et al.*, No. CV 12-135-BLG-DWM, 2014 WL 12588302 (D. Mont. Mar. 26, 2014), [voting rights case in the state of Montana] February-June, 2014

Expert Report in *Thomas Poor Bear, et al. vs. The County of Jackson, South Dakota*, 2014 WL 4702282 [voting rights case in the state of South Dakota] June-November, 2015.

Expert Report in the case of *Martin Cowen, et al. vs Brian P. Kemp*, No. 1:17-CV-04660-LMM, 2018 WL 8141305 (N.D. Ga. Jan. 25, 2018) [ballot access case, challenge to state's candidate and party ballot access requirements] January-May, 2018.

Expert Report in *Jayla Allen et al. v. Waller County, Texas et al.*, 472 F. Supp. 3d 351 (S.D. Tex. 2020) [challenge to the operation of early voting] September 2019-September 2020.

Expert Report in *Donald J. Trump et al. v. Kathy Boockvar et al.* 141 S. Ct. 1044, 208 L. Ed. 2d 517 (2021) [challenge to Pennsylvania's new no-excuse voting procedures] August, 2020.

Consultant on election administration to: Harris County, Texas; Albuquerque, New Mexico; Colorado County Clerks Association; The Pew Charitable Trusts; Arnold Foundation; Collin County, Texas; Lubbock County, Texas